**Amendments to the Claims:**

Please amend claims 1, 27, 33, and 40, add claims 42 and 43, and cancel claims 16-26 and 35-39. Following is a complete listing of the claims pending in the application, as amended:

1. (Currently Amended) A method for controlling temperature in a deposition process using a deposition chamber and a heat source outside the deposition chamber, comprising:

positioning a microfeature workpiece in athe deposition chamber;

monitoring a first temperature ~~from~~ that is a reading of a first temperature sensor positioned outside the deposition chamber;

monitoring a second temperature ~~from~~ that is a reading of a second temperature sensor positioned in the deposition chamber; and

increasing an internal temperature in the deposition chamber from an initial temperature to a deposition temperature during a temperature ramp-up in accordance with a ramp profile by (a) comparing a control temperature to a target temperature, the control temperature alternating between the first temperature and the second temperature during the temperature ramp-up, the target temperature being determined in accordance with the ramp profile, and (b) selectively delivering heat from the heat source to the deposition chamber in response to a result of the comparison.

2. (Original) The method of claim 1 wherein the control temperature is equivalent to the first temperature for a fixed first period of time and is equivalent to the second temperature for a fixed second period of time.

3. (Original) The method of claim 1 wherein the control temperature is equivalent to the first temperature for a first period of time and is equivalent to the second temperature for a second period of time, the first period of time being contiguous to and longer than the second period of time.

4. (Original) The method of claim 3 wherein the second period of time is selected to maintain the first temperature within a permissible operational range.

5. (Original) The method of claim 3 wherein the second period of time is no greater than about two minutes.

6. (Original) The method of claim 1 wherein the control temperature is equivalent to the first temperature for a first period of time, is equivalent to the second temperature for a second period of time, is equivalent to the first temperature for a third period of time, and is equivalent to the second temperature for a fourth period of time, each of the first and third periods of time being different from both the second period of time and the fourth period of time.

7. (Original) The method of claim 1 wherein the control temperature is equivalent to the first temperature for a first period of time, is equivalent to the second temperature for a second period of time, is equivalent to the first temperature for a third period of time, and is equivalent to the second temperature for a fourth period of time, each of the first and third periods of time being greater than either of the second and fourth periods of time.

8. (Original) The method of claim 1 wherein the control temperature switches from the second temperature to the first temperature when the first temperature reaches or exceeds a trigger temperature.

9. (Original) The method of claim 1 wherein the control temperature switches from the first temperature to the second temperature when the second temperature reaches or exceeds a first trigger temperature, and switches from the second temperature to the first temperature when the first temperature reaches or exceeds a second trigger temperature.

10. (Original) The method of claim 1 wherein the control temperature switches from the first temperature to the second temperature when the second temperature reaches or exceeds a first trigger temperature, switches from the second temperature to the first temperature when the

first temperature reaches or exceeds a second trigger temperature, switches from the first temperature to the second temperature when the second temperature reaches or exceeds a third trigger temperature, and switches from the second temperature to the first temperature when the first temperature reaches or exceeds a fourth trigger temperature, wherein the second trigger is temperature is different from the fourth trigger temperature.

11. (Original) The method of claim 1 wherein the control temperature switches from the first temperature to the second temperature after a fixed period of time and the control temperature switches from the second temperature to the first temperature when the first temperature reaches or exceeds a trigger temperature.

12. (Original) The method of claim 1 wherein the control temperature is equivalent to the first temperature for a first period of time and is equivalent to the second temperature for a second period of time, and wherein the heat is delivered to the deposition chamber at a higher rate during the second period than during the first period.

13. (Original) The method of claim 1 wherein the control temperature is a first control temperature, the method further comprising holding the internal temperature of the deposition chamber in a deposition temperature range, which encompasses the deposition temperature, during a deposition phase by:

determining a second control temperature as a function of both the first temperature and the second temperature;

comparing the second control temperature with the deposition temperature in a second comparison; and

selectively delivering heat to the deposition chamber in response to a result of the second comparison.

14. (Original) The method of claim 1 further comprising allowing the internal temperature of the deposition chamber to decrease below the deposition temperature after the deposition phase.

15. (Original) The method of claim 1 further comprising maintaining the internal temperature of the deposition chamber within a deposition temperature range that encompasses the deposition temperature, and, with the internal temperature within the deposition temperature range, delivering a precursor to the deposition chamber to deposit a material on the microfeature workpiece.

16-26. (Canceled)

27. (Currently Amended) A method for controlling temperature in a deposition process using a deposition chamber and a heat source outside the deposition chamber, comprising:

positioning a microfeature workpiece in athe deposition chamber of an enclosure;

monitoring a first temperature ~~from~~ that is a reading of a first temperature sensor positioned outside the deposition chamber;

monitoring a second temperature ~~from~~ that is a reading of a second temperature sensor positioned in the deposition chamber;

alternating a control temperature between the first temperature and the second temperature during a temperature ramp-up in the deposition chamber;

varying a target temperature in accordance with a ramp profile during the temperature ramp-up;

comparing the control temperature to the target temperature during the temperature ramp-up; and

selectively delivering heat from the heat source to the deposition chamber in response to a result of the comparison.

28. (Original) The method of claim 27 wherein the control temperature is equivalent to the first temperature for a first period of time and is equivalent to the second temperature for a second period of time, the first period of time being longer than the second period of time.

29. (Original) The method of claim 28 wherein the second period of time is selected to maintain the first temperature within a permissible operational range.

30. (Original) The method of claim 27 wherein the control temperature is equivalent to the first temperature for a first period of time, is equivalent to the second temperature for a second period of time, is equivalent to the first temperature for a third period of time, and is equivalent to the second temperature for a fourth period of time, each of the first and third periods of time being greater than either of the second and fourth periods of time.

31. (Original) The method of claim 27 wherein the control temperature is equivalent to the first temperature for a first period of time and is equivalent to the second temperature for a second period of time, and wherein the heat is delivered to the deposition chamber at a higher rate during the second period than during the first period.

32. (Original) The method of claim 27 wherein the control temperature is a first control temperature, the method further comprising holding the internal temperature of the deposition chamber in a deposition temperature range, which encompasses the deposition temperature, during a deposition phase by:

determining a second control temperature as a function of both the first temperature and the second temperature;

comparing the second control temperature with the deposition temperature in a second comparison; and

selectively delivering heat to the deposition chamber in response to a result of the second comparison.

33. (Currently Amended) A method for depositing a material on a microfeature workpiece using a deposition chamber and a heat source outside the deposition chamber, comprising:

positioning a microfeature workpiece in athe deposition chamber of an enclosure;

monitoring a first temperature ~~from~~ that is a reading of a first temperature sensor positioned outside the deposition chamber;

monitoring a second temperature ~~from~~ that is a reading of a second temperature sensor positioned in the deposition chamber;

heating the microfeature workpiece from an initial temperature to a deposition temperature in accordance with a ramp profile during a temperature ramp-up in the deposition chamber by (a) comparing a target temperature with a first control temperature in a first comparison, the target temperature being determined in accordance with the ramp profile and the first control temperature alternating between the first temperature and the second temperature during the temperature ramp-up, and (b) controlling ~~a~~the heater in response to a result of the first comparison;

determining a second control temperature as a function of both the first temperature and the second temperature;

maintaining a temperature of the microfeature workpiece within a deposition temperature range that encompasses the deposition temperature by (a) comparing the deposition temperature with the second control temperature in a second comparison, and (b) controlling the heater in response to a result of the second comparison; and

while maintaining the temperature of the microfeature workpiece within the deposition temperature range, delivering a precursor to the deposition chamber to deposit a material on the microfeature workpiece and an inside surface of a wall of the enclosure.

34. (Original) The method of claim 33 wherein the heater is a radiant heater and the deposited material reflects radiant heat.

35-39. (Canceled)

40. (Currently Amended) A method for controlling temperature in a deposition process using a deposition chamber and a heat source outside the deposition chamber, comprising:

positioning a microfeature workpiece in athe deposition chamber of an enclosure;

monitoring a first temperature ~~from~~ that is a reading of a first temperature sensor positioned outside the deposition chamber;

monitoring a second temperature ~~from~~ that is a reading of a second temperature sensor positioned in the deposition chamber;

heating the microfeature workpiece from an initial temperature to a deposition temperature during a temperature ramp-up in the deposition chamber by (a) comparing a first control temperature to a target temperature, the first control temperature alternating between the first temperature and the second temperature during the temperature ramp-up, the target temperature being determined in accordance with a ramp profile, and (b) delivering radiant heat from the heater to the deposition chamber in response to a result of the comparison ~~from a heater positioned outside the deposition chamber~~;

with the microfeature workpiece in a deposition temperature range that encompasses the deposition temperature, delivering a precursor to the deposition chamber and reacting the precursor to deposit a radiant heat-reflective reaction product on a surface of the microfeature workpiece and on an inner surface of the enclosure;

determining a second control temperature ~~as~~ that is a weighted average of the first temperature and the second temperature after the temperature ramp-up is completed; and

maintaining the microfeature workpiece at a temperature in the deposition temperature range by (a) comparing the deposition temperature with the second control temperature, and (b) controlling the heater in response to a result of the second comparison.

41. (Original) The method of claim 40 wherein depositing the radiant heat-reflective reaction product on the surface of the microfeature workpiece reduces radiant heat transmissivity of a wall of the enclosure that is disposed between the heater and the microfeature workpiece.

42. (New) The method of claim 1, further comprising delivering a precursor to the deposition chamber to deposit a conductive material on the microfeature workpiece after the temperature ramp-up is completed.

43. (New) The method of claim 42 wherein the deposited conductive material is substantially reflective.